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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/749,181	12/30/2003	Ralph T. Hoctor	130897	9961

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EXAMINER	
JAWORSKI, FRANCIS J	
ART UNIT	**PAPER NUMBER**
3737	

DATE MAILED: 02/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

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Office Action Summary	Application No.	Applicant(s)	
	10/749,181	HOCTOR ET AL.	
	Examiner	Art Unit	
	Jaworski Francis J.	3737	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 December 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3,5-23 and 25-49* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *49 is* is/are allowed.

6)☒ Claim(s) *1-3,5-23 and 25-48* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 5,9-10,18,25, 29-30,38,43-44 and 48 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over Habu et al in view of claims 6-8 and 14-16 of copending Application No. 10/948,434 .This is a provisional obviousness-type double patenting rejection.

Habu et al (US6176832) as noted in the earlier office action teaches a blood pressure monitoring method and system including transmitting beams of ultrasound energy from ultrasound transducer array groups 4a,4b under processor control and acquiring acoustic data concerning artery 2, estimating the artery diameter based upon data from the transducer groups and calculating the lumen area therefrom as well as

estimating the velocity of the pulse wave therefrom, see col. 5 lines 20-35 as exemplary, and computing the blood pressure as a function thereof.

With respect to claims 4, 38, 43 Habu et al in col. 9 lines 3-40 teaches correction for noise and incident angle which would include aberrant reflections by thresholding to isolate the valid pulse wave signal.

With respect to claims 5, 25, 44 the time change of vessel wall behaviour is analyzed in Habu et al, see col. 5 lines 17-19.

With respect to claims 9 and 10, 29 and 30 Habu et al cols. 4-5 bridging teaches gradient edge detection of the arterial walls.

Since the claimed subject matter in the '434 application includes the claiming of a a pulse wave velocity measurement that is of an arterial wall motion and includes minimization error including a trummed mean algorithm, it appears that the feature upon which applicants are relying for patentable distinction over Habu et al is claimed in the related copending application albeit in a slightly narrower form than a reflection error correction.

Claims 2, 22 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over Habu et al in view of claims 6-8 and 14-16 of the copending application, further in view of Asmar et al.

This is a provisional obviousness-type double patenting rejection.

As noted in the earlier Office action, while Habu et al notes in col. 8 lines 41-53 that any defined physiologic pressure may serve as a cuff (manschette) type reference, it would have been obvious in view of Asmar col. 13 table 2 that mean blood pressure

may have value in serving as a reference during studies of vascular pressure pathologies.

Claims 5-7, 25-27, 39-41 and 44-46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Habu et al in view of claims 6-8 and 14-16 of the copending application as applied to claim 1 above, and further in view of Katakura (US5535747) since if the former be considered to be deficient regarding time-variant analysis the latter in col. 5 teaches that correlation of the arterial wall motion traces may be used over time in order to track pulse wave velocity using Doppler techniques.

This is a provisional obviousness-type double patenting rejection.

Claims 12 and 13, 32 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Habu et al in view of claims 6-8 and 14-16 of the copending application as applied to claims 9, 1 above, and further in view of Benthin et al (US4660564) since the latter teaches that artery location may be tracked in order to perform pulse wave velocity measurements using a single scanline beam for each tracking location.

Claims 16 –17, 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Habu et al in view of claims 6-8 and 14-16 of the copending application as applied to claim 1 above, and further in view of Brisken (US4530363) since whereas the former is silent as to annular or beamformed apertures it would have been obvious in view of the latter to use such since this allows B-mode and Doppler to be practiced to identify flow with accurate focusing on the vessel.

Claims 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Habu et al in view of claims 6-8 and 14 – 16 of the copending application as applied to claim 18 above, and further in view of Mault (Pre-grant Publ. US2002/0103435) which teaches that a micromachined transducer and its electronics may be incorporated into an adhesive device for monitoring across the skin as in the former, see paras [0031-32].

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (f) he did not himself invent the subject matter sought to be patented.

Claims 1 –3, 5 - 23 and 25 - 48 are rejected under 35 U.S.C. 102(f) because the applicant did not invent the claimed subject matter.

Since the pulse wave corrective algorithms are claimed in copending application 10/948,434 in association with a differing inventive entity with respect to this application, this renders the claims in this application subject to rejection that the inventive subject matter was invented by a different inventive entity than the applicants.

Claims 3, 8, 11, 14-15, 23, 28, 31, 34-35, 42, 47 avoid the prior art of record.

Claim 49 is allowable insofar as it is directed to inventive subject matter not involved with corrective pulse wave velocity algorithms.

This action is NOT made final however the case should be prepared for final action.

Any inquiry concerning this communication should be directed to Jaworski Francis J. at telephone number 571-272-4738.

Francis J. Jaworski
Primary Examiner

FJJ:fjj

02-18-2006